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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,707	02/25/2002	David William Matula	12167.00	8349
20686	7590	04/29/2005	EXAMINER	
DORSEY & WHITNEY, LLP INTELLECTUAL PROPERTY DEPARTMENT 370 SEVENTEENTH STREET SUITE 4700 DENVER, CO 80202-5647			ARTHUR JEANGLAUDE, GERTRUDE	
		ART UNIT		PAPER NUMBER
		2144		
DATE MAILED: 04/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/080,707	MATULA ET AL	
	Examiner Gertrude Arthur-Jeanglaude	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 25 February 2002.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-3 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-3 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Drawings

The figures 1 and 2 of the drawings should be directly labeled as 1A and 1B and 2A and 2B.

Specification

The disclosure is objected to because of the following informalities: the word CONCLUSION at page 19 of the specification should be deleted. Also at page 14 of the specification, line 14, it appears that Applicant refers to Figure 4c) while the drawing only indicates Figure 4.

Changes must be made in the specification section of brief description of the drawings to Figs. 1A, 1B, 2A, 2B to provide consistency with the drawings. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 1 recites the limitation "the multiplicand" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the multiplier" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the low-order digits" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-3 are also rejected for incorporating the deficiencies of their base claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. (U.S. Patent No. 5,828,590).

As to claim 1, Chen et al. disclose an apparatus for higher radix binary multiplication, the apparatus comprising: means for multiplying the multiplicand by weight; means for recoding the multiplier; means for generating partial products of the low-order digits of the multiplier; and means for combining said partial products of the low-order digits of the multiplier and partial products of the multiplicand (See col.3 lines 25-46; col. 5, lines 40-col. 6, lines 30).

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As to claim 2, Chen et al. disclose the multiplicand and multiplier are radix-32 and the multiplier is recoded to radix-7 (See col. 8, lines 56-67).

As to claim 3, Chen et al. disclose the multiplicand and multiplier are radix-256 and the multiplier is recoded to radix-11 (See col. 7, lines 63-67).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Smith et al. (U.S. 5,150,322)

Orton (U.S. 5,297,206)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gertrude Arthur-Jeanglaude whose telephone number is (571) 272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GAJ

GAJ

April 25, 2005

Gertrude A. Jeanglaude
GERTRUDE A. JEANGLAUDÉ
PRIMARY EXAMINER